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We Claim:

1.   An echo cancelling system for cancelling echoes in a communication path comprising:

5   an echo locator coupled to said communication path to locate the positions of echo signals received from said communication path; and

an echo canceller coupled to said communication path to cancel echo signals received therefrom, said echo canceller becoming active in regions corresponding to the positions of echo signals in response to said echo locator.

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2.   An echo cancelling system as defined in Claim 1, wherein said echo canceller includes a first adaptive filter including selectable filter coefficients, said echo locator activating selected filter coefficients of said first adaptive filter corresponding to the positions of echo signals received from said communication

15   path.

3.   An echo cancelling system as defined in Claim 2, wherein said echo locator includes a second adaptive filter generating an aliased transfer function approximating that of said communication path, peaks in said transfer function being

20   used by said echo locator to activate said selected filter coefficients.

4.   An echo cancelling system as defined in Claim 3 wherein said echo locator generates output signals corresponding to peaks in said transfer function, said output signals being applied to said echo canceller to activate selected filter

25   coefficients corresponding to said peaks, the magnitude of said output signals being dependent on the magnitude of said peaks.

5.   An echo cancelling system as defined in Claim 4 wherein said first and second adaptive filters are LMS adaptive filters.

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6.   A method of cancelling echoes in a communication path comprising the steps:

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locating the positions of echo signals in said communication path; and

activating an echo canceller only in regions corresponding to the

positions of the echo signals thereby to cancel echoes in said communication path.

5   7.   The method of Claim 6 wherein said activating step further includes

the step of activating selected filter coefficients of an adaptive filter in said echo

canceller corresponding to the position of echo signals received from said

communication path.

10   8.   The method of Claim 7 further comprising the step of weighting the

selected filter coefficients in dependence of the magnitude of echo signals received

from said communication path.

     9.   An echo locator to locate echoes in a communication path comprising:

15   a first downsampler downsampling signals transmitted to said

communication path and generating downsampled reference signals;

               a second downsampler downsampling return signals received from said

communication path and generating downsampled return signals; and

               an adaptive filter generating an aliased transfer function approximating

20   that of said communication path to produce aliased estimated return signals in

response to said downsampled reference signals, said adaptive filter subtracting the

aliased estimated return signals from said downsampled return signals to generate

error signals, said error signals being fed back to said adaptive filter to adjust the

transfer function thereof, said adaptive filter generating output corresponding to peaks

25   in said transfer function thereby to signify the location of echoes in said return

signals.

     10.   An echo locator as defined in Claim 9 wherein said adaptive filter is an

LMS adaptive filter.

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